

REMARKS

This Amendment, submitted in response to the Office Action dated December 29, 2005, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1-39 are now pending in the present application.

I. Specification

The Examiner has objected to the specification asserting that the specification introduces new subject matter into the disclosure. In particular, the Examiner asserts that the newly added material on pages 2-3 of the Amendments to the Specification is not supported by the original disclosure. Applicant submits that the specification was merely amended to more literally describe claims 7 and 17. Therefore, the disclosure supports the specification modification.

II. Claim Rejections under 35 U.S.C. § 112

Claims 7 and 17 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The Examiner asserts that the recitation “said transformed image signals **which contains** a spatial frequency component corresponding to a grid array frequency of each possible stationary grid that may be used and then performs inverse wavelet transformation” is not described in Applicant’s specification.

Applicant submits that the recitation of claims 7 and 17 are described in the Applicant’s specification. However, in order to expedite the prosecution for the application, Applicant has amended claims 7 and 17 as indicated above. Consequently, Applicant submits that the § 112, first paragraph rejection of claims 7 and 17 should be withdrawn.

III. Rejections of claims 1, 2, 11, 12, 21, 24, 27, 28, 31 under 35 U.S.C. § 103

Claims 1, 2, 11, 12, 21, 24, 27, 28, 31 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Ohta (U.S. Patent No. 5,173,788) and Yazici et al. (U.S. Patent No. 6,333,990).

Claim 1

The Examiner asserts that Ohta discloses “transforming said original image signal, represented in a real space domain, into a plurality of transformed image signals which can be handled in a frequency domain” and “reducing a transformed image signal of said transformed image signals which has a desired frequency range containing a spatial frequency component corresponding to at least a frequency of said periodic pattern ...and then transforming said transformed image signals into an inverse-transformed signal in said real space domain.”

The Examiner concedes that Ohta does not disclose “reducing a transformed image signal of said transformed image signals which has a desired frequency range containing a spatial frequency component corresponding to at least a frequency of said periodic pattern **in only the vicinity of an array direction of said periodic pattern, not reducing any of said transformed image signals in a different direction from said vicinity of said array direction of said periodic pattern**” and cites Yazici to cure the deficiency. In particular, the Examiner asserts that this claimed feature was well known in the art and that Yazici discloses a periodic-pattern suppression method that reduces a transformed image signal which has a desired frequency range.

Assuming *arguendo*, Yazici teaches this aspect of the claim, the combination of Yazici with Ohta is not obvious. In particular, Ohta is directed to a device which depresses moiré

components of an image. In order to remove the moiré, a high frequency component of an image is compared with two predetermined threshold levels to obtain first and second more coordinates and components. See col. 4, lines 20-64. Calculations are then performed on selected moiré components the values. The calculated values are input to a composite circuit which combines the low frequency image data with the high frequency corrected frequency image data to obtain the whole corrected frequency image data. See col. 5, lines 5-16. Therefore, Ohta is not concerned with reducing a transformed image signal in the vicinity of an array direction of a periodic pattern. Consequently, modifying Ohta to include the teachings of Yazici would result in a substantial modification of the principle of operation of Ohta, evidencing that the Examiner's reasoning is merely a result of impermissible hindsight. MPEP 2143.01.

For at least the above reasons, claim 1 and its dependent claims should be deemed allowable. To the extent independent claims 2, 11, 12, 21 and 24 recites similar elements, claims 2, 11, 12, 21 and 24 and their dependent claims should be deemed allowable for similar reasons.

Claim 2

Claim 2 recites "reducing a transformed image signal of said transformed image signals which has a desired frequency range containing a spatial frequency component corresponding to at least **a grid array frequency of said stationary grid, which is actually used**, in only the vicinity of a grid array direction of said stationary grid, not reducing any of said transformed image signals in a different direction from said vicinity of said array direction of said periodic pattern." The Examiner concedes that Ohta does not teach this aspect of the claim and cites Yazici to cure the deficiency.

However, as indicated by the Examiner, Ohta is not at all concerned with a stationary grid. As discussed above, Ohta depresses moiré components of an image according to calculations with respect to threshold values. Ohta is not concerned with reducing a transformed image signal having a frequency range containing a spatial frequency component corresponding to at least a grid array frequency of said stationary grid as recited in claim 2. Therefore, any suggestion by the Examiner that adding further components to Ohta, such as a stationary grid, is obvious, would clearly be a result of impermissible hindsight.

Consequently, claim 2 and its dependent claims should be deemed allowable. To the extent independent claims 12, 21 and 24 recites similar elements, claims 12, 21 and 24 and their dependent claims should be deemed allowable for similar reasons.

IV. Rejection of claims 22-23 and 25-26 under 35 U.S.C. § 103

Claims 22-23 and 25-26 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Ohta, Yazici and Hara (U.S. Patent No. 6,173,086). Claims 22-23 and 25-26 should be deemed allowable by virtue of their dependency to claims 2 and 24 for the reasons set forth above. Moreover, Hara does not cure the deficiencies of Ohta and Yacizi.

V. Rejection of claims 29-30, 33, and 35 under 35 U.S.C. § 103

Claims 29-30, 33, and 35 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Ohta, Yazici and Barski et al. (U.S. Patent No. 6,269,176). Claims 29-30, 33, and 35 should be deemed allowable by virtue of their dependency to claims 2 and 12 for the reasons set forth above. Moreover, Barski does not cure the deficiencies of Ohta and Yacizi.

VI. New Claims

Applicant has added claims 38 and 39 to provide a more varied scope of protection.

Claims 38 and 39 recite subject matter similar to claims 7 and 17 except claims 7 and 17 recite “corresponding to a grid array frequency of each possible stationary grid to be used” instead of “may be used.”

VII. Allowable Subject Matter

The Examiner has indicated that claims 3-6, 8-10, 13-16, 18-20, 32, 34, 36, and 37 contain allowable subject matter and would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. At the present time, Applicant has not rewritten claims 3-6, 8-10, 13-16, 18-20, 32, 34, 36, and 37 in independent form since Applicant believes they will be deemed allowable, without amendment, by virtue of their dependency to claims 1, 2 and 12 for at least the reasons set forth above.

VIII. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/765,621

Attorney Docket No.: Q61229

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


Ruthleen E. Uy
Registration No. 51,361

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: June 29, 2006